

IN THE SPECIFICATION:

Please amend the paragraph beginning at page 1, line 11, as follows.

A communication network transfers information, such as data, voice, text or video information, among various devices connected to the network, such as telephones and computers. Information transmitted over a network is often formatted into packets or cells. Packet networks, such as networks using the Internet Protocol (IP), where transmitted data is divided into packets, are widely used. Packets reach their destination by traversing through one or more network elements, such as switches or routers. Packets typically include a header containing, for example, a source address and a destination address, as well as the actual data.

Please amend the paragraph beginning at page 5, line 1, as follows.

In a further variation, the packet data may be split and interchanged such that compressed biometrics information for two subsequent packets, S1 and S2 is reorganized. Generally, half of packet S1, referred to as S1a, is switched with half of packet S2, referred to as S2a, before transmitting the data. S1a consists of every other frame of digitized voice signal. The second half of S1, referred to as S1b, consists of all the remaining frames of S1 that are not in S1a. S2 is split into two parts, S2a and S2b, in a similar manner. After switching S1a with S2a, two new packets are produced, where packet P1 contains parts S2a and S1b and packet P2 contains parts S1a and S2b. The new packets P1 and P2 are sent over the network instead of S1, S2. If at a destination point, both packets P1 and P2 arrive, the packets P1 and P2 will be reconstructed to form packets S1 and S2 from P1 and P2 by switching S1a and S2a. If only one packet, such as packet P1, arrives, then the content of packet P1 will be split in two packets and loss information will be extrapolated. In this manner, only some reduction in voice quality will happen instead of full loss of information.

Please amend the paragraph beginning at page 11, line 12, as follows.

In a further variation, the packet data may be split and interchanged such that compressed biometrics information for two subsequent packets, S1 and S2 is reorganized. Generally, half of packet S1, referred to as S1a, is switched with half of packet S2, referred to as S2a, before transmitting the data. S1a consists of every other frame of digitized voice signal. The second half of S1, referred to as S1b, consists of all

the remaining frames of S1 that are not in S1a. S2 is split into two parts, S2a and S2b, in a similar manner. After switching S1a with S2a, two new packets are produced, where packet P1 contains parts S2a and S1b and packet P2 contains parts S1a and S2b. The new packets P1 and P2 are sent over the network 110 instead of S1, S2. If at a destination point, both packets P1 and P2 arrive, the packets P1 and P2 will be reconstructed to form packets S1 and S2 from P1 and P2 by switching S1a and S2a.

Please amend the paragraph beginning at page 11, line 27, as follows.

It is assumed that the audio-signal has a variable gradient. The gradient for a given audio data segment may change slowly or fast. When the gradient is slowly changing, an original voice data segment can be recovered when it is sampled at low rates. In the case of voice data for a speaker recognition system, it can be assumed that speaker data is represented as cepstra. N consecutive packets, where N is greater than 2, are represented as  $S_1, S_2, \dots S_N$ . Each packet is split into N sub-packets consisting of sub-samples (taken from N sub-samples of an original sample). These sub-packets can then be switched in a similar manner as sub-packets for the case discussed above where each packet was split into two packets ( $N=2$ ) and new mixed packets would be created. This allows the recovery of the audio signal if a higher percentage of packets is lost. When the gradient is changing fast, the packet is copied, rather than split, and several identical copies of a packet are sent. This redundancy compensates for the loss of some packets.

Please amend the paragraph beginning at page 13, line 4, as follows.

Similarly, voice data associated, for example, with Internet telephone services, can be split and reorganized. The voice telephone data may be represented as cepstra. The cepstra can be split into packets in a similar manner as described above for biometrics data. The quality of the audio data that is recovered from cepstra will degrade insignificantly if one takes out every second frame from cepstra (and replaces them with some extrapolations).

Please amend the paragraph beginning at page 13, line 15, as follows.

At times of low network traffic, for example, the biometrics data may be transmitted using standard Internet protocols, such as the TCP protocol discussed above. At times of moderate network congestion, the packet splitter 250 may reorganize the  
5 biometric data before splitting the data into packets, as discussed above in conjunction with FIGS. 2 and 4. At times of heavy network congestion, the packet splitter 250 may distribute a unique biometrics portion, such as packet 1 in FIG. 4, ~~can be distributed~~ among more than 2 packets. Generally, there is an inverse relationship between network traffic conditions and the recommended number of packets used for transmission.